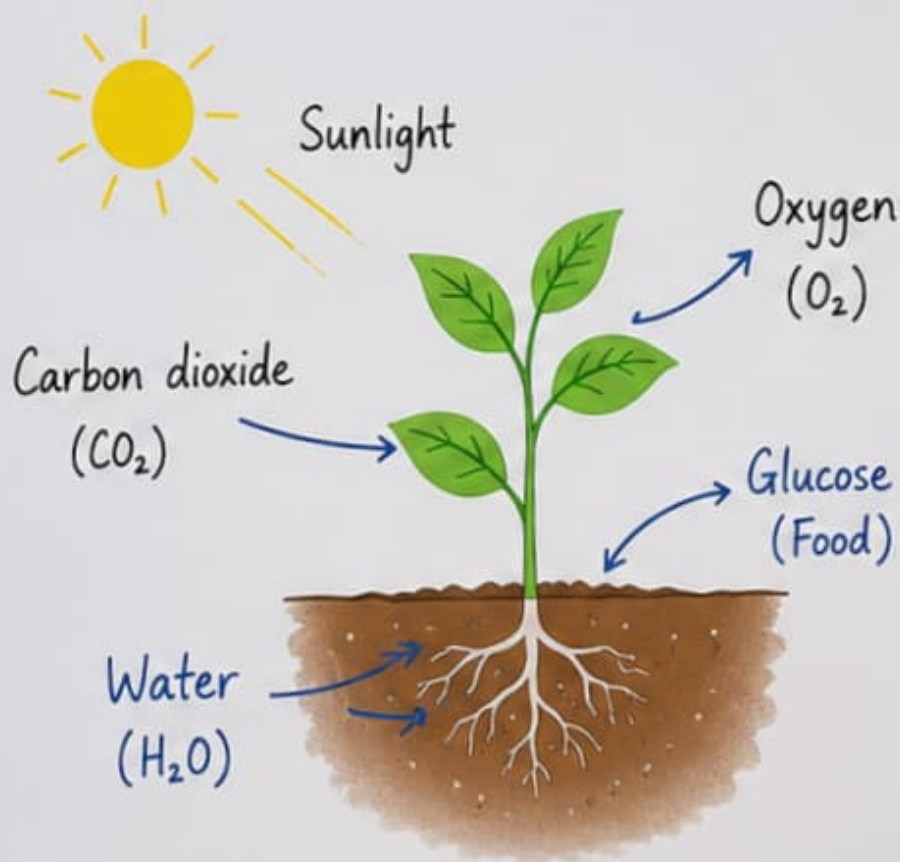


Photosynthesis in Plants

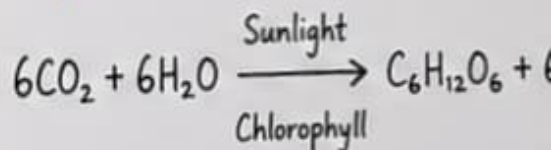
Process by which green plants make their own food.



Key Points:

- Occurs in leaves.
- Chlorophyll traps sunlight.
- Essential for life on Earth.

Equation:



LINEAR EQUATIONS IN ONE VARIABLE

Standard Form:

$$ax + b = 0, \quad a \neq 0$$

where a, b are real numbers.

Example 1:

Solve for x :

$$3x + 5 = 11$$

Solution:

$$3x + 5 = 11$$

(Given)

$$3x = 11 - 5$$

(Subtract 5 from both sides)

$$3x = 6$$

(Simplify)

$$x = \frac{6}{3}$$

(Divide both sides by 3)

$$x = 2$$

Example 2:

Solve for x :

$$5(x - 2) = 3(x + 4)$$

Solution:

$$5x - 10 = 3x + 12 \quad (\text{Expand})$$

$$5x - 3x = 12 + 10 \quad (\text{Transpose})$$

$$2x = 22 \quad (\text{Simplify})$$

$$x = \frac{22}{2} \quad (\text{Divide})$$

$$x = 11$$

Key Point:

- Follow the order of operations.
- Keep the variable on one side.
- Make calculations simple.